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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,334	11/30/2004	Geoffrey Kenneth Rochester	550-596	7632
23117	7590	06/09/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			MOHANDESI, IRAJ A	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/508,334

**Applicant(s)**

ROCHESTER ET AL

**Examiner**

Iraj A. Mohandesi

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 09/20/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/20/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/GB03/01173, filed on 03/19/2003.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 09/20/2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the Examiner is considering the information disclosure statement.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hassard US patent 6,568,181.

Regarding claim 1, Hassard'181 disclosing an apparatus for extracting power from a fluid flow comprising: a fluid drivable engine (40, column 4, line 59, Fig.3), a conduit (30, column 4, line 5, Fig.3) disposed to enable fluid communication between a portion of the fluid flow ( see column 4, line 11, Fig.3), the fluid drivable engine and a transmission fluid, the fluid in the fluid flow and the transmission fluid being different fluids the

Art Unit: 2834

transmission fluid being a gas (air ,see column 2,line 17) and the fluid flow being a liquid ( water, see column 3, line 30)and the portion of the fluid flow being at a lower pressure than the transmission fluid ( see column 7 lines 45-55 ) by virtue of its flow rate, thus causing the transmission fluid to be drawn through the conduit exiting the conduit via a plurality of entrainment outlets (end portion of 20s see Fig. 4) to become entrained in the fluid flow, the fluid drivable engine ( 40) being arranged such that the flow of the transmission fluid along the conduit (30) acts to drive the fluid drivable engine, and the size of each of the plurality of entrainment outlets being inherently that of a practical bubble size.

Regarding claims 2-7 and 12-14, Hassard'181 disclosing an apparatus for extracting power from a fluid flow comprising at least one fluid directing formation (10) formed to define a channel (see Fig. 3 and 9) ,and the fluid flow comprises a flow along a conduit (30) between two positions in a fluid stream, a conduit inlet position being at a higher fluid pressure than a conduit outlet position ( Fig. 3 and 9) and a flow of water (,see column 3, line 30),wherein the transmission fluid comprises air (see column 2,line 17) and the fluid drivable engine comprises a turbine (40) , wherein the conduit is linked to manifold from which a plurality of smaller conduits pass ( see Fig. 4 small passes of 30 join to a manifold ) , each of said smaller conduits comprising an entrainment outlet, the conduit comprising fluid directing formation ( see Fig 3), the fluid direction formations being arranged so as to cause downward flowing fluid to spin about a longitudinal axis (see Fig. 3).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassard US patent 6,568,181 and in view of Miller US patent 5,071,548.

Hassard'181 teaches all limitation of claimed invention except for a heat exchanger is arranged to cool the transmission fluid to condense.

Miller'548 discloses a fluid purifying apparatus having a heat exchanger (41) is arranged to cool the transmission fluid (column 12, line 11) and to condense (see column 12 line 32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Hassard'181 apparatus with a for a heat exchanger is arranged to cool the transmission fluid to condense as taught by Miller'548 for the purpose of arranging the transmission fluid to communicate with external plant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A. Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IM May 23, 2005

  
DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800